

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-26. Canceled.

27. (Currently Amended) A method for determining a mask-fit test pressure to be applied to a wearer's mask by ventilatory assistance apparatus, wherein the mask-fit pressure is adaptively dependent on a prior pressure treatment session of the wearer, said mask-fit test pressure not being substantially similar in magnitude to normal significantly different than pressures encountered in normal use of the wearer during the prior treatment session, said mask-fit pressure being greater than a minimum pressure and less than a maximum pressure encountered during the prior treatment session.

28. (Rejoined and Currently Amended) In a continuous positive airway pressure apparatus having an automatic titration mode that delivers a flow of pressurized breathable gas to a wearer's mask, a method for determining of a mask-fit pressure to be applied to the wearer's mask by the apparatus, said method comprising:

measuring by a pressure sensor the mask pressure used by the wearer during a treatment session; and

determining a mask fit test pressure from the pressures used by the wearer during the treatment session, said mask-fit test pressure not being substantially similar in magnitude to normal significantly different than pressures encountered in normal use of the wearer during the treatment session.

29. (Withdrawn) A method for determining a mask-fit test pressure to be applied to a wearer's mask by ventilatory assistance apparatus, the method comprising:

determining a percentile pressure of a previous ventilatory assistance session to be said test pressure.

30. (Withdrawn) The method of claim 29, wherein said percentile pressure is chosen from the range of the 75<sup>th</sup>-95<sup>th</sup> percentile pressure.

31. (Withdrawn) The method of claim 30, further comprising determining a base pressure to be said test pressure if there is no previous percentile pressure available.

32. (Withdrawn) The method of claim 31, wherein said base pressure is in the range of 10-12 cm H<sub>2</sub>O.

33. (Withdrawn) The method of claim 32, further comprising:  
determining that a previous pressure is available if a pressure ventilatory assistance session occurred for greater than a predetermined time interval.

34. (Withdrawn) The method of claim 33, wherein said predetermined time interval is three hours.

35. (Withdrawn) A method for assessing correct fitting of a mask delivering ventilatory assistance, provided by ventilatory assistance apparatus, to a wearer of the mask, the method comprising:

determining a percentile pressure of a previous ventilatory assistance session to be applied as a test pressure;

determining leak flow from said mask at the test pressure; and

displaying or otherwise indicating a magnitude of the leak flow as an indication of correct mask fitting.

36. (Withdrawn) The method of claim 35, wherein said leak flow is quantized to represent a degree of leak.

37. (Withdrawn) The method of claim 36, further comprising:

comparing said leak flow against a threshold value representing zero degree of leak; and

determining that there is correct mask fitting if the threshold is not exceeded.

38. (Withdrawn) The method of claim 36, further comprising determining a base pressure to be applied as said test pressure if there is no previous percentile pressure available.

39. (Withdrawn) The method of claim 38, wherein said percentile pressure is chosen from the range of the 75<sup>th</sup>-95<sup>th</sup> percentile pressure.

40. (Withdrawn) The method of claim 39, wherein said base pressure is in the range of 10-12 cm H<sub>2</sub>O.

41. (Withdrawn) The method of claim 39, further comprising determining that a previous pressure is available if a pressure ventilatory assistance session occurred for greater than a predetermined time interval.

42. (Withdrawn) The method of claim 41, wherein said predetermined time interval is three hours.

43. (Withdrawn) A method for determining a mask-fit positive test pressure to be applied to a wearer's mask by ventilatory assistance apparatus, the method comprising:

determining a percentile pressure of a previous ventilatory assistance session to be said positive test pressure.

44. (Withdrawn) The method of claim 43, wherein said percentile pressure is chosen from the range of the 75<sup>th</sup>-95<sup>th</sup> percentile pressure.

45. (Withdrawn) The method of claim 43, comprising determining a base pressure to be said positive test pressure if there is no previous percentile pressure available.

46. (Withdrawn) The method claim 45, wherein said base pressure is in the range of 10-12 cm H<sub>2</sub>O.

47. (Withdrawn) The method of claim 43, further comprising determining that a previous pressure is available if a pressure ventilatory assistance session occurred for greater than a predetermined time interval.

48. (Withdrawn) The method of claim 47, wherein said predetermined time interval is three hours.

49. (Withdrawn) A method for assessing correct fitting of a mask delivering ventilatory assistance, provided by ventilatory assistance apparatus, to a wearer of the mask, the method comprising:

determining a percentile pressure of a previous ventilatory assistance session to be applied as a positive test pressure;

determining leak flow from said mask at the positive test pressure; and

displaying or otherwise indicating a magnitude of the leak flow as an indication of correct mask fitting.

50. (Withdrawn) The method of claim 49, wherein said leak flow is quantized to represent a degree of leak.

51. (Withdrawn) The method of claim 49, further comprising:

comparing said leak flow against a threshold value representing zero degree of leak; and

determining that there is correct mask fitting if the threshold is not exceeded.

52. (Withdrawn) The method of claim 49, further comprising determining a base pressure to be applied as said positive test pressure if there is no previous percentile pressure available.

53. (Withdrawn) The method of claim 52, wherein said percentile pressure is chosen from the range of the 75<sup>th</sup>-95<sup>th</sup> percentile pressure.

54. (Withdrawn) The method of claim 52, wherein said base pressure is in the range of 10-12 cm H<sub>2</sub>O.

55. (Withdrawn) The method of claim 49, further comprising determining that a previous pressure is available if a pressure ventilatory assistance session occurred for greater than a predetermined time interval.

56. (Withdrawn) The method of claim 55, wherein said predetermined time interval is three hours.

57. (Previously Presented) The method of claim 27, wherein the mask-fit test pressure is determined based on a prior use by comparing leak flow to a threshold leak flow value.

58. (Previously Presented) The method of claim 57, wherein leak flow is determined over a predetermined time period.

59. (Previously Presented) The method of claim 58, wherein the leak flow is determined based on a time constant of about 10 seconds.

60. (Previously Presented) The method of claim 27, wherein the method is practiced with a CPAP device having two functional modes.

61. (Previously Presented) The method of claim 27, wherein determining the mask-fit pressure includes sampling of pressure signals in a gas supply assembly associated with the mask.

62. (Previously Presented) The method of claim 61, wherein the sampling of pressure signals occurs in a delivery tube of the gas supply assembly.

63. (Previously Presented) A method for determining a mask-fit test pressure to be applied to a wearer's face by ventilatory assistance apparatus, wherein:

the mask-fit pressure is adaptively dependent on a prior pressure treatment session of the wearer,

determining the mask-fit pressure includes sampling of pressure signals in a gas supply assembly associated with the mask, and

the sampling of pressure signals occurs in a blower of the gas supply assembly.

64. (Previously Presented) The method of claim 61, wherein the sampling of pressure signals occurs at predetermined intervals.

65. (Previously Presented) The method of claim 64, wherein sampling occurs at about 20 millisecond intervals.

66. (Previously Presented) The method of claim 61, wherein the sampling of the pressure signals includes determining a flow of gas in the mask and generating a delivery pressure signal.

67. (Previously Presented) A method for determining a mask-fit test pressure to be applied to a wearer's face by ventilatory assistance apparatus, wherein:

the mask-fit pressure is adaptively dependent on a prior pressure treatment session of the wearer,

determining the mask-fit pressure includes sampling of pressure signals in a gas supply assembly associated with the mask, and

determining the mask-fit pressure also includes processing the sampled pressure signals and producing a control signal based on the processed signals, wherein the control signal is provided to a motor to provide a determined treatment pressure.

68. (Previously Presented) The method of claim 67, further comprising comparing a signal representative of actual delivery pressure with the control signal.



69. (Previously Presented) The method of claim 27, further comprising varying at least one setting relating to test pressure intervals, test pressure period, and determined test pressure.

70. (Previously Presented) The method of claim 60, wherein the first mode is a manual mode and the second mode is an automatic titration mode, and wherein:

in the manual mode, the test-fit pressure is the current set treatment pressure, and

in the automatic titration mode, the test-fit pressure is a percentile pressure of the prior treatment session.

71. (Previously Presented) The method of claim 70, wherein the test-fit pressure is a base pressure if data from said prior treatment session is not available.

72. (Previously Presented) The method of claim 27, wherein pressure data from said prior treatment session is available if the prior treatment pressure occurred for at least a predetermined time interval.

73. (Previously Presented) The method of claim 72, wherein the predetermined time interval is about 3 hours.